

ART. XXX.—*The West Riding Lunatic Asylum Medical Reports*. Edited by J. CRICHTON BROWNE, M.D., F.R.S.E. Vol. V., 8vo. pp. 292. London: Smith, Elder & Co., 1875.

WE scarcely know what more we can say as to the general quality of this number of an excellent series, than to say that it sustains the high standard set up by its predecessors. It contains fifteen articles written by past and present officers of the Asylum, and by other physicians interested in the class of investigations there undertaken.

Dr. MERSON, Assistant at the Asylum, treats of the *Influence of Diet in Epilepsy*. He here regards food not as affecting the disease through its greater or less digestibility, but as furnishing more or less of the elements adapted to maintain or increase the nutrition of the gray matter of the brain. Believing that in epilepsy we have abnormal activity of this organ, he thinks food not especially promotive of its growth should be preferred. Upon this theory, farinaceous diet should be given, and nitrogenous withheld. To ascertain the practical correctness of this view, held by Dr. J. Hughlings Jackson as well as himself, Dr. Merson made some experiments. For four weeks, twelve patients had only nitrogenous diet, and twelve others only farinaceous. Then for another four weeks the two parties exchanged diets. The most decided results noticed were in the general mental condition. Upon farinaceous food, each group of patients became comparatively bright and active, while upon the other they in turn became heavier and more stupid. The effects upon the convulsions were perhaps less marked—certainly less uniform—but on the whole supported the preference given on theoretical grounds to the non-nitrogenous nourishment. Upon the additional theory of Dr. Jackson, that the augmented nutrition of the epileptic brain is carried on upon "a lower level" (whatever that means), phosphorus was afterwards given with farinaceous food, for a month, to twenty-two of these patients. The results were various, but not so favourable as was hoped.

Dr. FERRIER contributes an elaborate and ingenious paper upon *Labyrinthine Vertigo or Menière's Disease*. The essay was suggested by a case recently occurring in his practice.

Dr. LAWSON, Pathologist and Assistant at the Asylum, describes his experiments and observations as to the *Physiological Actions of Hyoscyamine*. In a few experiments upon small animals he noted changes produced in pulse and temperature. In two experiments on man he also observed the pupils, respiration, secretions, and general condition. The results varied greatly with different doses, and were too numerous to be particularized. In small or moderate doses the drug acts as a gentle stimulant, especially of the sympathetic and vaso-motor systems of nerves. In larger amounts it is an agent of great power, and often extremely useful in controlling maniacal excitement.

Clinical Assistant W. BEVAN LEWIS gives the results of his examinations in studying the *Histology of the Great Sciatic Nerve in General Paralysis of the Insane*. For first observing pathological changes in the sciatic nerves of general paralytics, the writer assigns the credit to Dr. Herbert C. Major, now and previously a valued officer of the Asylum, and contributor to its publications.

To the naked eye, we are told, the sciatic nerves of all general paralytics examined by the writer, have appeared smaller than natural, and flattened; and have felt soft and compressible. The neurilemma lacked its natural lustre.

The funiculi were slightly smaller than in health. Very marked atrophy of small groups of nerve-tubuli was observed in the midst of fibres perfectly healthy. With the progress of disease the wasting is more complete, and affects more fibres. The vascular network about the nerve-fibres was increased; and connective tissue—wanting, or of small amount in health—was plainly visible between the tubuli. These appearances are quite different from those found in the same nerve when degenerating from senile atrophy or from disuse of the limb.

Dr. Lewis goes on to make some inferences as to the course and character of general paralysis, which we have not space to present.

Dr. J. HUGHLINGS JACKSON presents a very valuable essay *On Temporary Mental Disorders after Epileptic Paroxysms*. Particularly glad are we to welcome such a just and temperate paper from a physician not especially devoted to the study and treatment of insanity. The public, lawyers, judges, and even medical men, seem predisposed to reject with scorn and indignation the plea of irresponsibility, when offered to save from the gallows the unhappy perpetrator of some bloody deed. The very striking cases reported by Dr. Jackson, with the strictly logical inferences which he draws from them, ought surely to cause any intelligent reader to hesitate, before ignoring or setting aside the carefully formed opinion of the expert in mental disease.

The original cases which form the text of Dr. Jackson's paper, are illustrations of absurd, improper, or unusual conduct following an epileptic seizure—which, moreover, was often so light as to attract little or no attention. The moral is, that as an epileptic may with apparent intention, deliberation, and contrivance, do trivial things of which he is actually unconscious, and which are results of disease, so also may he, with all appearances of cold-blooded and deliberate atrocity, or fiendish wantonness, commit some dreadful murder while his proper consciousness is asleep. Mental automatism is the not ill-chosen name which the writer invents for this condition of activity with suspended consciousness.

Many of these cases exhibit a degree of method, combination, and adaptation of means to ends, sufficient to insure for the sufferers, at the hands of a "common-sense" jury, death on the gallows, had they chanced to spill blood instead of committing some simple absurdity. There is, indeed, too much reason to fear that epileptics have suffered the death penalty, even of late years, for deeds which were wholly the offspring of their disease.

Dr. Jackson very properly lays stress upon the important fact that the usual visible tokens of epilepsy, even of the *petit mal*, may be wholly wanting, and the automatic act may be the first thing to attract attention. And the slighter the convulsive paroxysm is, the more elaborate is likely to be the delirium and automatism. At least as far as appearance goes, the latter phenomena replace the former.

Dr. ARBUCKLE, of the Asylum staff, gives the results of observations made by him with the ophthalmoscope, upon *The Appearance of the Retina and Choroid during the administration of various drugs*. His object was to determine whether the circulation within a healthy eye is affected by drugs. Although the rabbits were powerfully affected by the agents employed, and even killed by them, the disk, retina, and choroid showed no deviation from the normal condition. Nitrite of amyl, given to a man, did not produce the effect reported by other observers, being wholly without action upon the intra-ocular circulation. In epileptics and in general paralytics, the writer failed to find any modification of the vessels within the eye. It is scarcely needful to add, that Dr. Arbuckle believes the condition of the inner eye to be a wholly untrustworthy guide and index to the cerebral circulation.

We hardly know what to think of this apparently direct contradiction to the observations of other investigators. We have certainly been taught by other writers in these books that the circulation in the eye was a correct index to that in the brain, and greatly susceptible to the action of drugs. The editor at least deserves credit for candor and boldness in presenting both sides of the question.

Under the title of *Othæmatoma, or the Insane Ear*, LENNOX BROWNE, F. R. C. S. Edin., gives an account of that very curious effusion of blood followed by contraction and shrivelling, which is not uncommon among the chronic insane. It more commonly affects the left ear, and attacks men oftener than women. Idiots are said also to be liable to the disease. It has been supposed never to appear in persons of sane mind, but there seems now to be some little testimony to the contrary. There is no reason for attributing the disease to violence.

Dr. HERBERT C. MAJOR, now Deputy Medical Director of the Asylum, and author of many valuable papers in previous volumes, contributes a very curious and interesting paper, *Morbid Histology of the Brain in the Lower Animals*, showing the resemblances and differences between the cerebral histology of aged dogs and horses, and that of men affected with disease or old age. The changes in the brain of the lower animal seem very similar in kind to those in the human brain, though less in degree. The value of this article is much increased by the beautiful coloured lithographs of brain-sections which accompany it.

Dr. J. MILNER FOTHERGILL treats of *Cerebral Hyperæmia*, meaning that condition in which there is an increase of arterial blood passing through the brain. He emphasizes the fact that hyperæmia has two causes, general increase of blood-pressure, and a change in the tissues by which they attract or admit more blood. He then proceeds to describe the phenomena and results of cerebral hyperæmia under three heads: that due to vascular excitement, that without vascular excitement, and that produced by drugs. We query whether the latter form is not always coincident with the first or the second; but the division may be a convenient one.

H. R. OCTAVIUS SANKEY, under-graduate in medicine, describes *A New Process for Examining Brain-substance*. For a colouring agent, he finds that a peculiar aniline blue-black possesses especial advantages. He states in detail his whole method of preparing and mounting brain-sections. Some results of his study of the histology of the cerebellum are given, illustrated by two beautiful coloured lithographs.

Dr. C. F. NEWCOMBE, formerly of this asylum, treats of *Epileptiform Seizures in General Paralysis*. In some form, the majority of general paralytics suffer from such attacks at some period. The termination of the cases does not seem to be hastened by the attacks. The writer contradicts the statement of Griesinger, that seizures never occur until the disease is far advanced. A sudden fall of temperature, followed at once by a much greater rise, is observed at the onset of the paroxysms. Illustrative cases of general paralysis complicated with epileptiform attacks, are taken from the asylum records.

Dr. J. C. BROWNE, the editor, has prepared an elaborate paper upon the *Functions of the Thalami Optici*. Here again the records of the asylum furnish illustrative cases. The writer is convinced of the correctness of that view which regards the thalami as sensory centres. Destroying lesion of one of these, is distinguished by loss of general sensibility on the opposite side of body and face, and abolition of reflex excitability on the opposite side of the body. Cases are happily chosen to exhibit the different symptoms in patients whose

thalami were, or were not, found to be affected. Dr. Browne believes that his cases show the thalami to be to the sensory nerves what the auditory or olfactory ganglia are to their special nerves.

Why destruction of an optic thalamus should abolish reflex excitability, when complete removal of the brain causes its increase in parts supplied by spinal nerves, is a difficult question, and is here discussed at length, but not very satisfactorily answered.

Dr. A. M. WALLIS, formerly of this asylum, gives expression to his sense of the great value of *Chloral Hydrate in Epileptic Convulsions*. Many cases are adduced as proof. It is a little disturbing, just as we had yielded full belief to the claims of nitrite of amyl, as a controller of paroxysms, to find that drug rudely dethroned and another set up in its place. Between the two, however, convulsions ought to be well-nigh abolished.

Dr. LENNOX BROWNE has tabulated and summarized the results of a series of *Laryngoscopic Observations* made upon fifty patients affected with general paralysis. These curious and interesting examinations were made with less difficulty than would be expected, because of the diminished reflex excitability in throats of this class. The vocal organs were generally rather flabby and relaxed, with a tendency to congestion of the pharynx. Besides a want of tension, the vocal cords showed a want of co-ordinate action. The epiglottis was often unduly pendent.

We have now glanced—we fear in a very unsatisfactory manner—at the contents of this important work. The profession, and alienists in particular, owe to the West Riding Asylum management a debt of gratitude for the profound and laborious investigations there conducted.

B. L. R.

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ART. XXXI.—*Transactions of the American Otological Society*. Eighth annual meeting. Vol. II. Part 1. 8vo. pp. 96. Boston: Jas. Campbell, 1875.

THOUGH this number of the Transactions presents rather less original matter than the last, it contains some interesting and valuable papers, and bears ample evidence that American aural surgeons continue faithfully and earnestly at work. An elaborate *Report on the Progress of Otology* during the year, by Drs. BLAKE and MATHEWSON, occupies two-thirds of the pamphlet. More work having been done in the direction of anatomy and physiology, that section of the report is particularly interesting, and we regret that we have space only for a general outline of the nature of its contents. These comprise investigations upon the relations of the stapedius muscle, the anatomy and physiology of the Eustachian tube, the histology of the membranous semicircular canals, the comparative anatomy of the organ of hearing in locusts, grasshoppers, and mosquitos, the functions of the external ear, the analysis of composite sounds, the examination of the ear by polarized light, and the vexed question of the effects of division of the semicircular canals. The interest and instruction afforded by the clear and full *resumé* of these investigations will not be confined to aural surgeons. There is a second section of the report devoted to pathology and therapeutics, and a complete bibliography is added.

Dr. ALBERT H. BUCK, of New York, contributes a paper on *A Method of using Medicated Eustachian Bougies*. In view of the difficulty and danger attending the use of medicated fluids, he makes applications to the Eustachian tube by means of whalebone or catgut bougies armed with cotton-wool. His